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January 23, 2003

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: ***Ex Parte***
CC Docket Nos. 01-338, 96-98, 98-147

Dear Ms. Dortch:

RCN Telecom Services, Inc. ("RCN") submits the following information for the Commission's consideration in the above-captioned proceedings.

RCN urges the Commission to retain Signaling System 7 ("SS7")-based services, including signaling and call-related databases, as unbundled network elements ("UNEs") that are required to be made available by incumbent local exchange carriers ("ILECs") at Total Element Long Run Incremental Cost ("TELRIC")-based rates. As explained herein and in Comments and Reply Comments that RCN filed on April 5, 2002, and July 17, 2002, respectively, alternative providers of SS7 signaling and call-related databases cannot provide those services in a manner that is both as economical and technically acceptable as the ILECs themselves. RCN places great reliance on SS7 signaling and call-related databases in a variety of contexts in several parts of the country, and the detrimental effect on its business operations if such services were no longer available as UNEs would be considerable. Therefore, the Commission should continue to require provision of SS7 signaling and call-related databases on an unbundled basis.

Importance of SS7 Signaling and Call-Related Databases to Provision of Local Telecommunications Services

SS7 is a network platform that is used to transmit signaling for call set-up messages between switches and to access call-related databases, which return customer information or instructions for call routing to a switch via the Common Channel Signaling ("CCS") link. The CCS link transmits signaling information, such as call path

or other routing information, in packets from a local switch to a signaling transfer point ("STP"), which is a high-capacity packet switch. In this way, a call can be routed from one switch, which sends a series of signaling messages establishing a call path over the voice network, to another switch, through the CCS link. The STP then routes the packets on to other links, which extend to other switches, databases, and STPs, according to the address information contained in the packet. Because almost all of the competitive local exchange carrier-("CLEC") originated calls terminate or transit via an ILEC's tandem or at end office switches, and almost all of the calls terminating to a CLEC switch originate or transit via an ILEC's tandem or from end office switches, most SS7 signaling activities primarily involve an ILEC's SS7 network. As a result, the most efficient and reliable engineering configuration (utilizing the least number of network elements) would require a CLEC to directly connect with the dominant ILEC in a market.

In addition to its primary function of exchanging call set-up messages within and between carrier networks, SS7 supports other functions. These include inter-network billing information, the local number portability ("LNP") database, 800 database, and line information database ("LIDB"). The LIDB contains information associated with the line for fraud control and customer name purposes (which is generally called "CNAM" information). When a subscriber to CNAM service receives a call, the switch queries the LIDB database to obtain the calling name information associated with the called telephone number, which is then displayed for the subscriber. When a CLEC purchases signaling from an ILEC, the ILEC's SS7 platform launches CNAM queries through the ILEC's STPs to the ILEC's LIDB database. The LNP and 800 databases provide call routing information needed to terminate a call to the correct destination.

CLEC access to signaling networks and call-related databases such as the LNP, 800, and LIDB databases is crucial to the ability to provide telecommunications services to customers, as it is an integral part of any call processing. Without such access, or without access on a nondiscriminatory basis, a CLEC would be unable or impaired in its ability to route calls on its network. The Commission has previously concluded that unbundled access to SS7 signaling and call-related databases is both essential to effective interconnection of ILEC and CLEC networks and critical to entry in the local exchange market.[1] Accordingly, the Commission determined in its *UNE Remand Order* that signaling networks are network elements that ILECs must provide to CLECs on an unbundled basis.[2] With regard to call-related databases, the Commission found that its decision to unbundle the signaling network led it to unbundle call-related databases.[3]

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1 *In the Matter of the Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order, CC Docket No. 96-98, 15 FCC Rcd 3696 (1999) ("*UNE Remand Order*") at ¶¶ 383, 402. *See Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, First Report and Order, CC Docket Nos. 96-98 and 95-185, 11 FCC Rcd 15499 (1996) ("*Local Competition Order*") at ¶ 478.

2 *UNE Remand Order* at ¶ 383.

3 *UNE Remand Order* at ¶ 411.

RCN's Reliance on Unbundled SS7 Signaling and Call-Related Databases

RCN is a facilities-based competitive local exchange provider serving 8 markets using its own switches and local distribution network, in addition to leasing local loops from ILECs in the Verizon and SBC regions. RCN utilizes ILEC SS7 network platforms that allow it to set up calls and launch various types of call-related database queries, including LNP, 800, and CNAM/LIDB queries, in its operating areas. RCN purchases these services directly from the various ILECs, and does not currently obtain any services directly from third-party providers.

Third-Party Providers of SS7 Signaling and Call-Related Databases Are An Insufficient and Economically Prohibitive Substitution for ILEC Providers

In addition to Comments and Reply comments submitted in the above-referenced cases, RCN has participated in numerous state commission proceedings in an effort to improve ILEC provisioning of SS7 signaling and call-related databases. The issues RCN has addressed include failure to provide nondiscriminatory routing of third-party CNAM queries, CNAM query failures, CNAM query charges that exceed TELRIC rates, and deficient billing practices related to SS7 signaling and call-related databases. RCN submits that the pervasive difficulties associated with ILEC provisioning of SS7 signaling and call-related databases will only be exacerbated if such services are no longer available as UNEs. In addition to the cost issues addressed herein, ILECs who are not required to provide such services as UNEs will have little incentive to supply them in an efficient manner. Furthermore, it would force RCN to introduce additional network elements from other vendors prior to exchanging call-related information with the ILECs, thus reducing network reliability and making troubleshooting difficult. Based on RCN's understanding that approximately 90% of all calls pass through ILEC networks, it makes little sense from a technical, economical or practical standpoint to require third-party vendor involvement.

RCN's concern about the increased difficulty of obtaining SS7 signaling and call-related databases if they are no longer required to be furnished as UNEs is founded both on technical and cost considerations. Although a limited number of third-party hub providers offer SS7 signaling, the services currently available from such providers are technically inferior to the services that RCN obtains from ILECs and do not comprise an adequate substitute for such services. For example, hub providers utilize an additional SS7 platform between the CLEC's switch and the ILEC's SS7 platform. This extra layer of functionality employed by hub providers raises network costs and results in decreased network reliability As RCN explained in its Reply Comments, alternative SS7 networks do not provide the same network robustness that ILEC SS7 networks offer. For example, third-party providers only have a few geographically dispersed STPs and no local STPs.[4] Some providers rely on a single STP pair to serve regions covering large areas of the country, and massive portions of their networks could be affected by a single point of failure. Also, third-party providers rely primarily on ILECs for CNAM information

[4] Comments of RCN *et. al,* at 84.

because ILECs are the sole providers of such information for the vast majority of local customers.[5]

In addition to the technical problems that would result if RCN were forced to obtain SS7 signaling and call-related database services from third-party suppliers, the cost of acquiring such services would be prohibitive. As RCN noted in its Reply Comments, even alternative providers still rely on, and must tap into, ubiquitous ILEC networks.[6] Access to the ILEC SS7 network is vital for traffic exchange even where third-party providers are utilized. This means that the costs such providers charge to CLECs such as RCN reflect their own "middleman" use of ILEC networks, thereby increasing the costs that are passed on to CLECs. For example, RCN understands that an alternative provider cannot provide CNAM information without access to the ILEC's database, and the costs of obtaining such access would be reflected in the alternative provider's price charged to RCN. In addition, CNAM charges are assessed on a per query basis and RCN understands that the difference between the TELRIC rates charged by ILECs and the third-party provider rates is astronomical. For example, Verizon New York's CNAM query rate is approximately $0.000094 per query and a third-party provider rate of $0.02 is available to access the same database. The effect of paying such inflated costs and not being able to procure SS7 signaling and call-related database services at TELRIC rates would be to significantly increase RCN's costs.

Eliminating Unbundled SS7 Signaling and Call-Related Databases Would Adversely Affect Local Competition

RCN would be severely disadvantaged if ILECs were no longer required to provide unbundled SS7 signaling and call-related databases as UNEs. Given the numerous infirmities and prohibitive cost associated with obtaining such services from third parties, it is neither technically feasible nor economically realistic for RCN to expect to rely on alternative suppliers. If the ILECs are inappropriately freed from TELRIC-based pricing requirements and related provisioning obligations for signaling and call-related databases, RCN expects both that the cost will increase exponentially and the quality of services will suffer. RCN's current and future business operations would be adversely affected under either scenario, and its ability to provide telecommunications in competition with the ILECs would be compromised. RCN therefore urges the Commission to ensure that CLECs have continued access to SS7 signaling and call-related databases on an unbundled basis.

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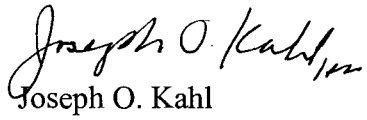
5 Reply Comments of RCN *et. al*, at 99.

6 Reply Comments of RCN *et. al,* at 97-98.

A copy of this letter is being filed electronically for inclusion in the record of each of the above-captioned proceedings.

Sincerely,



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